

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): High purity hafnium having a purity of 4N or higher excluding zirconium and gas components, an oxygen content of 40wtppm or less, a sulfur content of 10wtppm or less, a phosphorus content of 10wtppm or less, and a zirconium content of 0.1wt% or less.

Claim 2 (currently amended): A sputtering target ~~or thin film, comprising a sputtering target or thin film formed~~ consisting of high purity hafnium having a purity of 4N or higher excluding zirconium and gas components, an oxygen content of 40wtppm or less, a sulfur content of 10wtppm or less, a phosphorus content of 10wtppm or less, and a zirconium content of 0.1wt% or less.

Claims 3-6 (canceled).

Claim 7 (new): A sputtering target according to claim 2, wherein said high purity hafnium of said sputtering target has a residual resistance ratio of at least 120.

Claim 8 (new): A sputtering target according to claim 7, wherein said high purity hafnium of said sputtering target has a residual resistance ratio of 120 to 200.

Claim 9 (new): A sputtering target according to claim 8, wherein said oxygen content is 10wtppm or less.

Claim 10 (new): A sputtering target according to claim 9, wherein said sputtering target has a body produced by subjecting a hafnium raw material to electron beam melting to form a hafnium ingot, subjecting the ingot to deoxidation with molten salt, and forming a sputtering target from the ingot after said deoxidation.

Claim 11 (new): A thin film deposited on a substrate, said thin film consisting of high purity hafnium having a purity of 4N or higher excluding zirconium and gas components, an oxygen content of 40wtppm or less, a sulfur content of 10wtppm or less, a phosphorus content of 10wtppm or less, and a zirconium content of 0.1wt% or less.

Claim 12 (new): A thin film according to claim 11, wherein said hafnium thin film has a residual resistance ratio of at least 120.

Claim 13 (new): A thin film according to claim 12, wherein said hafnium thin film has a residual resistance ratio of 120 to 200.

Claim 14 (new): A thin film according to claim 13, wherein said oxygen content is 10wtppm or less.

Claim 15 (new): A thin film according to claim 14, wherein said thin film a sputtered thin film produced by subjecting a hafnium raw material to electron beam melting to form a hafnium ingot, subjecting the ingot to deoxidation with molten salt, forming a sputtering target from the ingot after said deoxidation, and depositing said thin film on the substrate by performing sputtering with the sputtering target.

Claim 16 (new): High purity hafnium according to claim 1, wherein said high purity hafnium has a residual resistance ratio of at least 120.

Claim 17 (new): High purity hafnium according to claim 16, wherein said high purity hafnium has a residual resistance ratio of 120 to 200.

Claim 18 (new): High purity hafnium according to claim 17, wherein said oxygen content is 10wtppm or less.

Claim 19 (new): High purity hafnium according to claim 18, wherein said high purity hafnium is produced by subjecting a hafnium raw material to electron beam melting to form a hafnium ingot and subjecting the ingot to deoxidation with molten salt.